

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
Amendment of Section 73.622(b) of)
the Commission's Rules, DTV)
Table of Allotments)
(Charlottesville, Virginia))

MM Docket No.
RM No.

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Chief, Allocations Branch

**PETITION FOR RULEMAKING
AND REQUEST FOR EXPEDITED ACTION**

1. Central Virginia Educational Telecommunications Corporation ("CVETC"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, 47 C.F.R. §73.623, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the Table of Allotments for the digital television ("DTV") service to change the DTV channel allotment for station WHTJ-DT, Charlottesville, Virginia, from channel *14 to Channel *46. In light of the impending May 1, 2000 deadline for CVETC to file the WHTJ-DT construction permit application, CVETC respectfully requests expedited action on this Petition.

2. CVETC is the licensee of noncommercial educational television station WHTJ(TV), Charlottesville, Virginia, which currently operates on NTSC channel *41. As the attached engineering exhibit of Cohen, Dippell and Everist, P.C. (the "Engineering Statement") indicates, the proposed channel substitution will obviate the possibility of WHTJ-DT interfering with public safety and commercial land-mobile

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operations which operate on spectrum immediately adjacent to Channel 14, as well as with FM aural STL facilities housed at the multi-user WHTJ-DT transmission site.

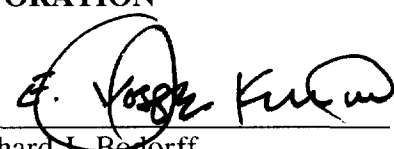
3. As demonstrated in the Engineering Statement the substitution of Channel *46 for Channel *14 at Charlottesville involves no change in WHTJ-DT's reference coordinates. Moreover, while the proposed substitution may create additional interference to other television stations, the proposed allotment meets the Commission's *de minimis* interference criteria because the interference to those stations is less than 2%, with the aggregate interference for both stations less than 10%. See Engineering Statement, Table III.

4. Accordingly, CVETC respectfully requests that the Commission expeditiously commence a rulemaking proceeding to amend the DTV Table of Allotments to allot and assign DTV channel *46 to Charlottesville, Virginia (in lieu of Channel *14) for use by WHTJ-DT.

Respectfully submitted,

**CENTRAL VIRGINIA EDUCATIONAL
TELECOMMUNICATIONS
CORPORATION**

By: _____


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November 5, 1999

ENGINEERING REPORT
PETITION FOR RULE MAKING
TO AMEND SECTION 73.622
OF THE FCC RULES BY SUBSTITUTING
UHF-TV DTV CHANNEL 46 FOR CHANNEL 14
AT CHARLOTTESVILLE, VIRGINIA

NOVEMBER 1999

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

City of Washington)
) ss
District of Columbia)

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That the attached engineering report was prepared by him or under his supervision and direction and,

James M. Bowie

Subscribed and sworn to before me this 3rd day of November, 1999.

Carl L. Bryan
Notary Public

My Commission Expires: 2/28/2003

This engineering report has been prepared on behalf of Central Virginia Educational Telecommunications Corporation ("CVETC"), licensee of non-commercial educational television station WHTJ, Charlottesville, Virginia, in support of its petition for rule making to amend Section 73.622(b) of the FCC Rules and Regulations. In the original DTV Table of Allotments adopted by the Commission in Appendix B of the Memorandum, Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket No. 87-168¹, WHTJ was allotted UHF Channel 14 for its DTV channel at Carters Mountain, Charlottesville, Virginia. CVETC proposes to substitute Channel 46 instead of DTV Channel 14 at Charlottesville, Virginia, as an amendment to FCC Rule Section 73.622(b) as follows:

Charlottesville, Virginia

Section 73.622(b); Substitute DTV Channel 46* for Channel 14*

The reference coordinates for the proposed new allotment are unchanged:

NAD-27

North Latitude: 37° 58' 58"

West Longitude: 78° 29' 00"

Allocation Situation

Tables I and II show the allocation situation for the proposed DTV Channel 46 allotment.

It is proposed to operate the Channel 46* allotment with a non-directional ERP of 50 kW with a radiation center of 517 meters AMSL. The attached Table III shows the area and population

¹ Adopted February 17, 1998, Released February 23, 1998.

*Non-Commercial educational allotment.

that may receive interference from the proposed operation. Table III indicates the potential interference population will not exceed the Commission's guidelines provided in its Public Notice dated August 10, 1998 (Additional Application Processing Guidelines for Digital Television (DTV)). Therefore, the proposed operation would not have any adverse impact on the existing analog or proposed DTV allotments.

Reasons for Channel Substitution

The proposed channel substitution will enable CVETC to operate without potentially impacting Public Safety and Commercial land-mobile radio station operations whose operating frequencies are located immediately adjacent to UHF-TV Channel 14. Furthermore, second harmonic effects of TV Channel 14 may fall across the aural STL spectrum used by FM transmitting stations at Carters Mountain to receive their programming. Without a channel substitution, it is estimated that CVETC may have to spend \$500,000 to \$1,000,000 to construct and operate on Channel 14 without causing interference to land-mobile and aural STL's.

Accordingly, the proposed Channel 46 DTV substitution will enable CVETC to bring a new digital non-commercial television service to the Charlottesville area without inviting unnecessary potential interference problems to existing land-mobile radio and aural STL services and the associated expenses involved in mitigating these potential problems. The proposed channel substitution, therefore, would serve the public interest.

COHEN, DIPPELL AND EVERIST, P. C.

TABLE I
DTV TO NTSC UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 46* FOR CHANNEL 14* AT
CHARLOTTESVILLE, VIRGINIA
OCTOBER 1999

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual km</u>	<u>Required km</u>
46	0	WHTJ-DT	Charlottesville, VA	37°58'58" 78°29'00"	—	—
31	-15	None within 140 km			—	80.5
32	-14	None within 140 km			—	80.5
38	-8	None within 140 km			—	80.5
39	-7	None within 140 km			—	80.5
42	-4	WVPY	Front Royal, VA	38°57'36" 78°19'52"	109.3	80.5
43	-3	None within 140 km			—	80.5
44	-2	None within 140 km			—	80.5
45	-1	None within 140 km			—	106.0
46	0	WVFX	Clarksburg, WV	39°18'02" 80°20'37"	218.2	217.3
47	+1	None within 140 km			—	106.0
48	+2	None within 140 km			—	80.5
49	+3	None within 140 km			—	80.5
50	+4	None within 140 km			—	80.5
53	+7	WNVT	Goldvein, VA	38°37'42" 77°26'20"	116.1	80.5
54	+8	None within 140 km			—	80.5

COHEN, DIPPELL AND EVERIST, P. C.

TABLE II
DTV TO DTV UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 46* FOR CHANNEL 14* AT
CHARLOTTESVILLE, VIRGINIA
OCTOBER 1999

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual km</u>	<u>Required km</u>
46	0	WHTJ-DT	Charlottesville, VA	37°58'58" 78°29'00"	—	—
45	-1	None within 200 km			—	110.0
46	0	WJCB-DT	Norfolk, VA	36°48'32" 76°30'13"	218.4	196.3
46	0	WBFF-DT	Baltimore, MD	39°20'10" 76°38'59"	219.2	196.3
46	0	WVVA-DT	Bluefield, WV	37°15'21" 81°10'55"	251.5	196.3
46	0	WKBS-DT	Altoona, PA	40°34'12" 78°26'26"	287.3	196.3
47	+1	WUPV-DT	Ashland, VA	37°44'32" 77°15'18"	111.3	110.0

COHEN, DIPPELL AND EVERIST, P. C.

TABLE III
INTERFERENCE SUMMARY
WHTJ-DT, CHANNEL 46, CHARLOTTESVILLE, VIRGINIA
NOVEMBER 1999

A study of predicted interference caused by the proposed WHTJ-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

Baseline WHTJ-DT: Allotment, Ch. 14, 50 kW, 352 meters HAAT, 37°58'58" N.Lat., 78°29'00" W.Long. (NAD-27)
Proposed change: Ch. 46, 50 kW, 352 meters HAAT, 37°58'58" N.Lat., 78°29'00" W.Long (NAD-27)

<u>Affected Station:</u>	<u>Appendix B</u>	<u>Distance/Bearing</u>	<u>Interference (% of Population Served)</u>	
			<u>Baseline</u>	<u>New</u>
WBFF-DT, Channel 46, Baltimore, MD Application, 955 kW, 386 meters HAAT	98.9% area match	219.2 km/46.0°	5.8%	0.9%
WUPV-DT, Channel 47, Ashland, VA Application, 1000 kW, 249 meters HAAT	100.0% area match	111.4 km/103.6°	2.1%	0.1%